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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,764	10/20/2003	Byung-Ryul Ryoo	1293.1910	8966

21171 7590 10/07/2008

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EXAMINER	
GOMA, TAWFIK A	
ART UNIT	PAPER NUMBER
2627	

MAIL DATE	DELIVERY MODE
10/07/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/687,764	RYOO ET AL.	
	Examiner	Art Unit	
	TAWFIK GOMA	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 September 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 7-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 7-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to the amendment filed on 9/11/2008

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 7, 8 and 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Komma et al (US 5644413) in view of Yagi et al (US 5754513).

Regarding claim 1, Komma discloses an optical pickup apparatus comprising: a light source which emits laser light (45, fig. 19); a beam splitter which changes the travel path of incident light (48, fig. 19); an objective lens which condenses light passed through the beam splitter to form a light spot on an optical recording medium (50, fig. 19); and a photo detector which receives light reflected from the optical recording medium and then passed through the beam splitter to detect an information signal and an error signal (53, fig. 19), wherein the optical pickup apparatus further comprises a grating which diffraction-transmits all incident light (94, fig. 20), a wavelength plate which changes polarization characteristic of incident light (95, fig. 20), and an optical output compensating lens which compensates output of light incident from the light source (100, fig. 20), all of which being disposed on an optical path between the light source and the beam splitter (99, fig. 19), wherein at least two of the grating, the wavelength plate, and the optical output compensating lens are formed in one body (99, figs. 19 and 20).

Furthre regarding claim 1, Komma discloses a holder in which the light source is fixed (45, fig. 19) but fails to disclose a cylinder, in which at least two of the grating, the wavelength plate, and the optical output compensating lens are fixed and which is movable in an optical axis direction with respect to the holder and is installed rotatably, wherein a position of the cylinder is adjustable in the optical axis and rotatable around the optical axis direction with respect to the holder. In the same field of endeavor, Yagi discloses a cylinder (121, fig. 82a) supporting optical elements including a grating (12, fig. 82a) and which is capable of supporting the elements to be rotatable about an optical axis (col. 66 lines 9-22) and adjustable in an optical axis direction (col. 66 lines 15-22 and col. 61 lines 12-22). It would have been obvious to one of ordinary skill in the art to modify the optical pickup disclosed by Komma by providing for a cylinder for rotating and moving the optical element as taught by Yagi. The rationale is as follows: One of ordinary skill in art at the time of the applicant's invention would have been motivated to provide the rotatable and movable support in order to adjust parameters of an optical axis for multiple types of disks used with a single pickup (see Yagi, col. 61 lines 12-22).

Regarding claim 2, Komma further discloses wherein the grating is formed on an optical incident surface and/or an optical emitting surface of the wavelength plate, so that the grating and the wavelength plate are formed in one body (99, fig.19).

Regarding claim 3, Komma further discloses wherein the wavelength plate, which is formed in one body with the grating, is bonded to the optical output compensating lens (99, fig. 20).

Regarding claim 4, Komma further discloses wherein the grating is formed on

an optical incident surface and/or an optical emitting surface of the optical output compensating lens, so that the grating and the optical output compensating lens are formed in one body (94, 100, 99, fig.20).

Regarding claim 5, Komma further discloses wherein the wavelength plate and the optical output compensating lens are bonded to each other (95, 100, fig. 20).

Regarding claim 7, Komma further discloses wherein the grating is formed on an optical incident surface of the wavelength plate, so that the grating and the wavelength plate are formed in one body (94, 95, fig. 20).

Regarding claim 8, Komma further discloses wherein the wavelength plate, which is formed in one body with the grating, is bonded to the optical output compensating lens (95, 100, fig. 20).

Regarding claim 11, Komma further discloses wherein the grating is formed on an optical incident surface of the optical output compensating lens, so that the grating and the optical output compensating lens are formed in one body (94, 100, fig. 20).

Claims 9, 10 and 12 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Komma et al (US 5644413) in view of Yagi et al (US 5754513)

Regarding claims 9, 10 and 12 Komma in view of Yagi disclose all of the components of the optical element and their alternative arrangement as applied above (see claims 1-5, 7, 8 and 11). Claims 9, 10 and 12 are directed to a rearrangement of the optical elements disclosed by Komma. It would have been obvious to one of ordinary skill in the art to modify the optical element disclosed by Komma by rearranging the optical elements. The claims are deemed an

obvious rearrangement that does not change the scope of the overall invention (see MPEP 2144.04 Paragraph VI (C)). See *In re Japikse*, 86 USPQ 70 (CCPA 1950).

Response to Arguments

Applicant's arguments filed on 9/11/2008 have been fully considered but are not persuasive. With respect to applicant's arguments that the cylinder of Yagi is not rotatable around the optical axis direction, this argument is not persuasive because Yagi discloses in figure 82 (a) and col. 66 lines 1-14, that the cylinder is rotated around the optical axis direction. Specifically, Yagi discloses that the diffraction grating's angle is adjustable such that the azimuth of the lattice of the diffraction grating is corrected. Figure 82 (a) clearly shows the diffraction grating which lies in the optical path of the laser beam having a rotation capability around the optical axis direction. Applicant's arguments are directed to example 30 of Yagi's disclosure which is a different embodiment and is not relied on by the examiner to show the rotation of the cylinder around the optical axis direction. Example 36 is the cited example relied on by the examiner.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAWFIK GOMA whose telephone number is (571)272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph H. Feild/
Supervisory Patent Examiner, Art Unit 2627

/Tawfik Goma/
Examiner, Art Unit 2627